

Embedded Systems Engineer

Location

Boston, MA

Overview

Become the lead engineer in the development of firmware for solar inverters and related I/O interfaces. Have good instrument troubleshooting skills to assist in the development of hardware with embedded firmware. Support the development of new products by providing diagnostics and validation software. Must be able to operate independently with minimal supervision in a fast paced, dynamic, flexible environment. Must be able to use different development tools, from Graphical User Interface development tools to embedded firmware.

Description of Duties

- Lead developer for embedded firmware using C (or C++).
- Familiar with TI digital signal processors, FPGA and I/O processors
- Development of rich client applications on a windows platform.
- Develop written software specifications for functional performance and I/O interface behavior from more general product requirements specifications – software specifications should make reference to the embedded hardware specifications and component limitations.
- Development of test plans and regression testing check list for validation of the software design.
- Work closely with the hardware design team to integrate the system level design and validation testing.
- Use emulators, oscilloscopes, multimeters, network analyzers, logic analyzers, and other laboratory equipment to debug embedded systems operation.

Special Qualifications or Background Needed

- BSEE or BSCE in Electrical Engineering, Computer Sciences and 5+ years related experience.
- Track record of success in developing (embedded) software for commercial/industrial products.
- Over 5 years programming in C or C++ experience.
- Hands-on experience with LabVIEW.
- Extensive experience with multi threaded applications.
- Experience writing device drivers for windows platform.
- Extensive experience developing software for power electronics applications.
- Must be familiar with TI digital signal processors, Atmel AVR, and FPGAs.
- Must be familiar with I/O oriented controllers (such as Coldfire)
- Must have experience working in a PC-based development environment.
- Experience working with Ethernet and Ethernet based protocols.
- Experience working with Dnet and Profibus protocols.